DOCUMENT RESUME

ED 028 528 EA 002 128

By-Fraenkel, Jack R.

One Model for Curriculum Development.

San Francisco State Coll., Calif.
Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.
Bureau No-BR-5-1314
Pub Date Feb 69
Contract-OEC-6-10-182
Note-10p.; Paper presented at the Annual Meeting of the Amer. Educ. Res. Assn. (Los Angeles, Calif., Feb. 5-8, 1969).
EDRS Price MF-$0.25 HC-$0.60
Descriptors-Course Content, Curriculum, *Curriculum Development, Diffusion, Educational Objectives, Educational Practice, Inservice Education, *Instructional Innovation, Learning Activities, *Models, Research, Resource Materials, Student Evaluation, Teacher Role, Teaching Methods
Identifiers-Taba Curriculum Development Project

The Taba Curriculum Development Project at San Francisco State College developed a 1-8 social studies curriculum organized around teaching-learning units. In the process, a curriculum model evolved that organizes and interrelates five major components--objectives, content, learning activities, teaching strategies, and evaluative measures--so that a system of teaching and learning is represented. The model contains a number of innovative aspects. Several problems emerged as a result of the dual process of, on the one hand, basing the social studies curriculum on this model, and, on the other hand, the model evolving as the project staff developed the curriculum. Problems were also encountered in disseminating the model: (1) Getting teachers to understand the interactive relationships within the model, (2) keeping teachers flexible and innovative, (3) keeping resources up-to-date, (4) retraining teachers starting to use the Taba curriculum, (5) maintaining inservice training, (6) developing evaluation techniques to measure student attainment of the curriculum objectives, and (7) realizing that more research is necessary. (HW)

EDO 28528

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ONE MODEL FOR CURRICULUM DEVELOPMENT

PROBLEMS AND POSSIBILITIES

(Paper prepared for Presentation at the Annual Meeting of AERA, Los Angeles, California, February 5-8, 1969)

Jack R. Fraenkel

San Francisco State College

The work reported herein was performed pursuant to a contract with the United State Department of Health, Education and Welfare, Office of Education, under the provisions of the Cooperative Research Project. (OE6-10-182)

EA 002 128

The Need for Curriculum Models

Curriculum models are needed for several reasons. They can:

. provide a framework whereby curriculum builders may consider the many problems with which they are continually faced -- for example, the kind of society that is needed, the kind of individuals students should become; what kind of knowledge is of most worth; what material to include in courses of study; how to organize this material for instruction; how to evaluate the effectiveness of a curriculum design, and the like. Different models can suggest alternative ways by which these and other questions may be resolved within the format of a particular curriculum design.

. indicate certain key factors which any adequately developed curriculum design must include. Certain elements -- for example, objectives, content, teaching strategies, learning experiences and evaluative measures seem essential for curriculum builders to consider. Curriculum models can emphasize what these elements may be.

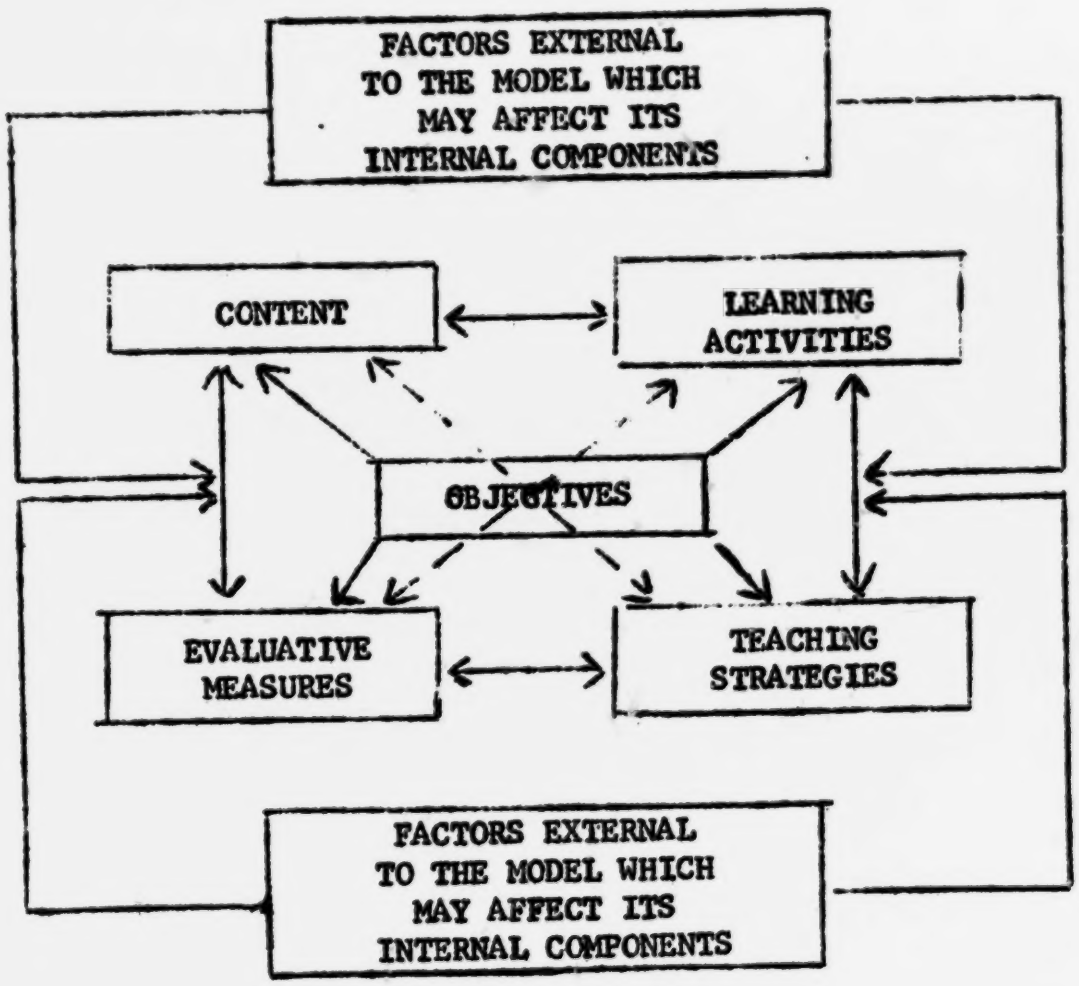
. indicate how various elements of curriculum interact and affect one another Important elements of curriculum cannot be developed adequately in isolation. Curriculum models can point up the interrelationships which exist among such elements.

. suggest factors which otherwise might be overlooked or underemphasized. Certain factors (e.g., the locale in which a particular curriculum is to be implemented, the nature of the student population for which a curriculum is designed, the personal style and characteristics of the teachers to be involved) may markedly affect the success of a particular curriculum design. Such factors can be overlooked by curriculum builders, and curriculum models can help to insure their consideration.

. serve as steps in the development of more adequate curriculum theory. As the relationships suggested by curriculum models gather empirical support, they may contribute to the building of generically applicable theories of learning and teaching.

Characteristics of the Model

Part of the work of the Taba Curriculum Development Project at San Francisco State College has involved developing a 1-8 social studies curriculum organized around teaching-learning units. In the process, a curriculum model has evolved that includes an organization of, and relationships among, five major, mutually interactive components -- objectives, content, learning activities, teaching strategies, and evaluative measures -- so that a system of teaching and learning is represented. This model is shown in Fig. 1 below:


FACTORS EXTERNAL TO THE MODEL WHICH MAY AFFECT ITS INTERNAL COMPONENTS
CONTENT
LEARNING ACTIVITIES
OBJECTIVES
EVALUATIVE MEASURES
TEACHING STRATEGIES
FACTORS EXTERNAL TO THE MODEL WHICH MAY AFFECT ITS INTERNAL COMPONENTS

The model contains within it a number of innovative aspects:

Objectives: Overall goals, originating from a variety of sources (e.g., the demands mdde by culture and society, the needs and interests of students; the social science disciplines), are broken down into behavioral statements, classified in terms of the kinds of student accomplishments expected (e.g., the development of thinking skills, the acquisition, understanding and use of important elements

of knowledge, etc.) and justified on the basis of a clearly thought out rationale.

Content: The content for each grade level in the Curriculum is contained within a number of teaching-learning units, all emphasizing to some degree a yearly theme. Each unit consists of three kinds of knowledge:

a) Key concepts are selected from a variety of social science disciplines because of their power to organize and synthesize large numbers of specific facts. Understandings of these concepts (e.g., interdependence, cooperation, cultural change, social control) are expanded and deepened throughout the grades;

b) "Main Ideas" (i.e., generalizations)* are derived from these key concepts Each individual unit within a year's work, however, centers around an "organizing idea". These organizing ideas represent a special case of one of the main ideas, are appropriate to the grade level for which a unit is designed, and deal with the particular content being studied in the unit.**

c) Content samples are chosen to illustrate, explain, and develop the main ideas. Each content sample represents an in-depth study of a variety of specific facts. It should be emphasized, however, that any one of a variety of content samples can be used to develop the more fundamental concepts and ideas. All three levels of content are chosen on the basis of clearly stated criteria (e.g., validity, significance, relevance, relationship to students' needs, interests, and developmental level, etc.) and then placed into an organized sequence.

Learning Activities: The content contained in the units within a year's work is incorporated into learning activities selected and organized in accordance with

* For example, a main idea at the third grade level is "Tradition influences the ways in which a group of people modify their behavior."

** For example, an organizing idea at the third grade level is: "The rules and customs of the desert nomad help maintain his traditional life."

clearly specified criteria (e.g., justifiability, transferability, variety of function, open-endedness, etc.). Care is taken to insure that the learning activities develop multiple objectives: thinking, attitudes, knowledge, and skills, and that they are pedagogically and psychologically appropriate.

Teaching Strategies: Especially designed teaching strategies which identify specific procedures that teachers may use are included within the curriculum. Some have been designed to encourage students to examine their individual attitudes and values. Particularly innovative are certain strategies which promote the development of children's cognitive skills, such as comparing and contrasting, conceptualizing, generalizing, and applying previously learned relationships to new and different situations.

Evaluative Measures: A variety of objective format devices have been selected or prepared to measure the effectiveness of the curriculum in helping students to explain or recognize causal relationships, apply in new settings important generalizations developed in the curriculum, and to interpret social science data. Several open-ended devices have been designed to measure the quality of students' generalizations, the flexibility and variety of students' conceptualizations, and the variety and nature of the content which students use in response to open-ended questions. A coding scheme has been developed and used to analyze teacher-student discussions as to the levels of thinking which they exhibit.

It is to be reemphasized that each of these components -- objectives, content, learning activities, teaching strategies and evaluative measures -- affect each of the others. They are mutually interactive.

Problems in Development of the Model

In part, the 1-8 social studies curriculum is based on this model. In part, the model evolved as the project staff developed the curriculum. Several problems emerged as a result of this dual process:

First, the project staff became almost immediately aware of the necessity for a continual restructuring and rewriting of the grade-level units. Since the model evolved out of staff discussions in which ideas were being continually exchanged and revised, this often resulted in frequent changes in objectives, ideas, conceptual development, content samples, learning activity sequences and evaluative devices, before they were even dry on paper. Changes in one part of the model necessitated changes in other parts. If curriculum designs are to remain dynamic and continue to evolve, therefore, it appears that curricula need to evolve more or less inductively, in a continual give and take manner, rather than deductively in a straight line fashion from pre-ordained principles. Needless to say, curriculum workers who desire some degree of closure, along with neat, wrapped-up curriculum packages will be unhappy with, and probably unable to work effectively using this type of approach to curriculum building.

Second, was the problem of content validity. Specific factual descriptions quickly became outdated.* The inclusion of such outdated information had to be guarded against, for its inclusion could have particularly damaging consequences in the Taba curriculum. Relationships among facts are built up in units throughout the grades in order to develop ideas. Facts used at one grade level, therefore, may be referred to again at a later grade level in order to illustrate a new and different idea. Errors could thus become compounded. This rapid obsolescence of what is currently regarded as "factual" is a continual danger in curriculum building, and suggests the necessity for a continuing review and revision of curricular materials.

* For example, a curriculum might relate the life-style of a nomadic people to their way of securing their material needs. Government intervention through compulsory education laws may change their life style. A new system of relationships would then have to be developed in that curriculum.

Third has been the tendency of content consultants to disagree on such matters as the more enduring relationships represented in the concepts and ideas developed in the curriculum, and which of many content samples most adequately illustrated these relationships. Not only do consultants from different disciplines differ with each other, but scholars within the same discipline often disagree among themselves. The fact that such disagreements are unavoidable must be accepted by curriculum designers. Conflicting recommendations of content consultants can best be handled within a particular curriculum design by insuring that all decisions made are consistent with its rationale.

Fourth has been the amount of time that was necessary to develop the project units. A brief description of how the units in the Taba Curriculum were prepared may illustrate this difficulty. Project staff members and classroom teachers initially formulated a tentative list of ideas to serve as the focus for a year's program and discussed these with a number of consulting scholars.

Using this now modified list of ideas, curriculum workers on the project staff then prepared outline drafts of the main ideas, key concepts, and factual content to be included in the units for a specific grade level. Consulting scholars checked these outlines for content validity, power, and significance.

Tentative drafts of the units incorporating the consultant's suggestions were then prepared and submitted to the total project staff for consideration. Each unit was critiqued with regard to the innovative features of the curriculum (e.g., balance and scope of content, opportunity for cognitive and attitudinal development, appropriateness of learning activities, degree to which understanding of key concepts and main ideas are promoted, etc.)

The units concepts and main ideas were then revised in light of this critique. Such revisions were then tried out by a number of classroom teachers trained by the project staff or by project-trained teacher/leaders. The teachers

critiqued the revisions (as to main ideas which were vaguely stated, whether they considered other or additional content samples more appropriate, if additional learning activities were needed, and the like). Still further changes then took place in the units. Such interactions between the project staff, classroom teachers, and consulting scholars in the disciplines were frequent, but they required a considerable amount of time. The development of viable and intellectually powerful curriculum designs, however, does take time, and to indicate the opposite would be misleading. Our efforts in this regard suggest that curriculum designers not only expect, but be prepared for this fact.

Problems in disseminating and implementing the model

The curriculum from which the model evolved has been explored in a number of different settings:

a) with different school systems: from rural to suburban to urban; from affluent to impoverished; and from those with ample to those with sparse professional resources.

b) in a wide variety of teacher training and informational situations: one to two week summer workshops; NDEA institutes of several weeks duration; week-end sessions; year-long programs meeting on a once or twice monthly basis; hour-long briefing sessions at professional meetings; and "one-shot" consultancies with individual schools or districts.

c) in pre-service courses in curriculum and instruction;

d) in different curricular areas (e.g., biology, economics, drama, and mathematics).

These efforts at dissemination have revealed a variety of problems or concerns, and led us to a number of conclusions about the implementation of curriculum innovations. Some of these now follow:

1. One problem has been that involved in getting teachers to understand the interactive relationships existing among the major components of the model. The fact that each of the components continually affect each of the others, and are thus in a continual state of flux, is a very difficult concept for many teachers, indeed one which very few seem prepared to accept. This suggests that greater exploration of how various curriculum components affect and interact with each other be explored in pre-and in-service training courses.

2. A second difficulty has been that of keeping teachers flexible and innovative. Our experience has been that many teachers have preferred to accept as <u>given</u> what we have intended as guidelines. Many have desired closed-ended answers rather than open-ended suggestions. Most teachers admittedly do not have the time to be curriculum designers, nor should we expect them to be such. Nonetheless we are not interested in contributing to the robotization of teaching. How to encourage flexibility in teachers, and to help them become capable of innovating <u>within</u> curriculum designs carefully worked out by curriculum workers remains a major problem. This problem suggests the necessity for curriculum designs to have built into them the quality of flexibility and the idea that knowledge is continually changing.

3. A third concern has been the lack of accurate and up-to-date resources which elementary children can use. Many of the materials which do exist are organized on a basis which is contrary to the organization of the curriculum. There are but a few books, films and filmstrips specifically geared for elementary age children which describe accurately the existing state of many cultures. In particularly short supply are books which present individuals in the United States and other lands with whom children can identify and whose problems they can share.

4. A fourth problem has been the retraining required of teachers starting to use the Taba curriculum. For example, teachers need to understand that the learning activities serve multiple objectives and have been placed in carefully worked out sequences to achieve this end. Since different kinds of activities serve different pedagogical functions (e.g., intake, organization, interpretation or expression) teachers need to be alert when they substitute activities to insure that those substituted perform the same function as those removed. Many teachers also need to change considerably their teaching style. For example, stress is placed on question-asking rather than answer giving; this involves a rather different conception of teaching than many teachers are comfortable with.

5. A fifth difficulty has been the realization that continual in-service training even for experienced teachers is necessary. Since the curriculum model is an evolving one, teachers must be continually alerted to new developments and ideas, and helped to utilize them effectively. Without an occasional shot in the arm, even the most expert and experienced teacher becomes mechanistic. In addition, if the curriculum is to prove self-renewing, local leadership must be developed in order to build up a steadily increasing pool of competent personnel.

6. A sixth problem has been the difficulty involved in developing evaluation techniques appropriate for measuring student attainment of the objectives of the curriculum. Our experience suggests that the selection or creation of evaluative measures be undertaken by evaluators working in partnership with curriculum workers from the start. This encourages a continual exchange of ideas and assists the evaluator to prepare measures particularly geared to curricular objectives.

7. Lastly has been the realization that much more research is needed on the kind of teacher style and personality most suited to work with and improve upon

particular curriculum models. Much curriculum work to date has been based more on intuition than on supporting empirical evidence.

Conclusion

In conclusion, the Taba Curriculum model contains a number of features that are innovative in several respects--it emphasizes the acquisition, understanding, and use of ideas and concepts rather than facts alone; it carefully defines the terminal behaviors expected of students; it includes a number of carefully designed teaching strategies which encourage the development and acquisition of certain specified intellectual skills; it encourages student examination of the attitudes and values which they possess; it includes sequentially designed learning activities in order to encourage cumulative learning; and it provides for continual teacher and student evaluation of student progress.

JRF/l&v
1/10/69